

# Pre-application Advice Request

Thoroton Solar Farm

13/01/2021



#### Disclaimer

Neo Environmental Limited shall have no liability for any loss, damage, injury, claim, expense, cost or other consequence arising as a result of use or reliance upon any information contained in or omitted from this document.

#### Copyright © 2020

The material presented in this report is confidential. This report has been prepared for the exclusive use of RES. The report shall not be distributed or made available to any other company or person without the knowledge and written consent of RES or Neo Environmental Ltd.





#### Prepared For:

RES



#### Prepared By:

#### Neo Environmental:

Nicole Beckett BSc (Hons) AIEMA

Graham Cameron BSc MA

Daniel Flenley BSc (Hons) MPhil Grad CIEEM

Michael Briggs BSc (Hons) MSc ACIfA MIAI

Michael McGhee BSc TechIOA

Paul Neary BA H.Dip MA MSc MIEnvSc MIAI ACIFA CEnv



|             | Name           | Date       |
|-------------|----------------|------------|
| Edited By:  | Nicole Beckett | 13/01/2021 |
| Checked By: | Michael Briggs | 13/01/2021 |
|             | Name           | Signature  |
| Approved By | Paul Neary     |            |



# CONTENTS

| 1.  | INTRODUCTION                                       | 5  |
|-----|--|----|
| 2.  | SITE DESCRIPTION                                   | 6  |
| 3.  | DEVELOPMENT DESCRIPTION                            | 8  |
| 4.  | NEED FOR THE DEVELOPMENT                           | 9  |
| L   | Local Planning Policy                              | 9  |
| 5.  | LANDSCAPE AND VISUAL                               | 16 |
| L   | Landscape Baseline                                 | 16 |
| \   | Visual Baseline                                    | 17 |
| Į   | Landscape and Visual Effects                       | 18 |
| 6.  | ECOLOGY  | 20 |
| 7.  | CULTURAL HERITAGE & ARCHAEOLOGY                    | 22 |
| 8.  | HYDROLOGY  | 23 |
| 9.  | ACOUSTICS  | 23 |
| 10. | TRAFFIC AND ACCESS                                 | 24 |
| 11. | GLINT & GLARE                                      | 24 |
| 12. | OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN | 25 |
| 13. | . CONCLUSION                                       | 26 |
| 14. | APPENDICES   | 28 |
| A   | Appendix A – List of Figures                       | 28 |
| /   | Appendix B: Flood Map for Planning                 | 28 |



# 1. INTRODUCTION

- 1.1. Neo Environmental Ltd, on behalf of RES, request Pre-Application Planning Advice for a proposed 49.9MW solar farm development (the "Proposed Development") on lands between Hawksworth and Thoroton, circa 15.5km east of Nottingham, Nottinghamshire.
- 1.2. Please see Figure 1 of Appendix A for the Site Location Plan.
- 1.3. This Pre-application Request is accompanied by the following appendices:

Appendix A: List of Figures

Figure 1: Site Location Map

Figure 2: Field Numbers

Figure 3: National Landscape Character Areas (NCA) Map

Figure 4: Environmental Designations Map

Figure 5: Designated Heritage Assets Map

Appendix B: Flood Map for Planning



# 2. SITE DESCRIPTION

- 2.1. The Proposed Development Site is located in a semi-rural setting on lands on lands between the small settlements of Hawksworth (0.1km west) and Thoroton (0.3km southeast), circa 15.5km east of Nottingham, Nottinghamshire. (Figure 1: Appendix A).
- 2.2. Centred at approximate Grid Reference E475829, N343034, the Proposed Development Site comprises several fields covering a total area of c. 68.7 hectares. The Proposed Development Site covers low lying lightly undulating agricultural land with an elevation range of c. 20m to 25m AOD. Internal field boundaries comprise, hedgerows, tree lines and linear strips of woodland shelter belt. External boundaries largely consist of mature to lower hedgerows with individual trees and some evident gaps. In terms of existing electricity infrastructure, a pylon line passes through the eastern side of the Proposed Development Site.
- 2.3. There are several recreational routes located within and close to the Proposed Development Site including a bridleway passing through the northern fields (Fields 2 and 3; See Figure 2 of Appendix A), a Bridleway and PRoW in closest proximity to the east, in addition to the PRoW to the south and south west between Hawksworth and Thoroton. A National Cycle Network (NCN) route 64 also shares the minor road on the east side of the Proposed Development Site.
- 2.4. The Proposed Development Site is mostly contained within Flood Zone 1 (at little or no risk of fluvial or tidal / coastal flooding), however there are some large areas of Flood Zone 2 and 3 which follow the watercourse/drains within the site and these will be considered carefully during the design phase.

#### Site Selection

2.5. The Proposed Development Site at Thoroton is assessed as being a good location for a solar farm for the following reasons:

It is in an area with some existing industrial elements including the electricity pylons, located on lower elevations of the site:

The site has good solar irradiation levels;

It lies outside of any environmental, landscape or archaeological designations;

With the proposed Biodiversity Management Plan (BMP) the site will be significantly enhanced for ecology; and

Sheep grazing using a low intensity grazing regime will allow agricultural activities to continue, therefore the site will have a dual use.



2.6. Largely because of the aforementioned attributes, as well as the benign nature of solar farm construction, limited disturbance to the existing environment is anticipated as a result of the implementation of the proposed solar farm.

#### **Site Restoration**

- 2.7. The Proposed Development is temporary and reversible in nature, with a modelled operational lifespan of circa 40 years.
- 2.8. Following cessation of energy generation, all panels, security fence and inverters will be decommissioned, and all plant and machinery will be removed from the site. The enhanced field boundary hedgerows will be left in situ which, together with the reversion of the land to its former agricultural use, will have beneficial effects upon the landscape character and quality of the Proposed Development Site and surrounding landscape.

#### Planning History and Cumulative Considerations

- 2.9. A search of Rushcliffe Borough Councils online planning records shows that there have been no relevant planning applications related to the Proposed Development Site.
- 2.10. There are no other operational solar farms within close proximity to the Proposed Development, however a cumulative search of developments in planning within 5km would be undertaken as part of the Landscape and Visual Assessment (LVA) of any future planning application.



# 3. DEVELOPMENT DESCRIPTION

- 3.1. The Proposed Development will consist of the construction of a c. 49.9MW solar farm. It will involve the construction of bi-facial ground mounted solar photovoltaic (PV) panels, new access tracks, battery storage, underground cabling, perimeter fencing with CCTV cameras and access gates, a temporary construction compound, substation and all ancillary grid infrastructure and associated works. The solar farm will result in the production of clean energy from a renewable energy resource (daylight).
- 3.2. The following features are anticipated to be included as part of the Proposed Development:

The installation of fixed tilt bi-facial, ground mounted solar arrays running from east to west across the site. The solar arrays are not anticipated to exceed 3m in height and will be angled at approximately 10-40° to the horizontal, in order to capture maximum radiation:

The solar panels will have a non-reflective surface, which will increase the proportion of radiation absorbed, removing the risk of unwanted reflection and glare;

Invertors/transformer units which will convert the Direct Current (DC) into an Alternating Current (AC) which is compatible with the National Grid;

Independent Distribution Network Operator (iDNO) substation;

Internal access tracks, to allow for the construction and maintenance of the solar panels;

Containerised battery storage units to supplement the solar arrays and store excess energy; this will cover a footprint of circa 2 acres;

As the proposed solar farm will require little maintenance, the site will be unmanned. In order to protect the installation, an unobtrusive security fence (deer fencing) will be installed around the perimeter of the site. In addition to the security fence, CCTV cameras will be installed: and

Additional landscaping including hedgerow planting and improved biodiversity management. Limited waste will be produced and almost all elements are recyclable.



# 4. NEED FOR THE DEVELOPMENT

- 4.1. Climate change is one of the greatest challenges facing the world today. Carbon dioxide (CO<sub>2</sub>) levels have increased by circa 45% since the Industrial Revolution. Other greenhouse gases such as methane have increased by similarly large amounts, creating a 'greenhouse effect', trapping the suns energy and causing the Earth and its oceans to warm.
- 4.2. The UK is a party to the United Nations Framework Convention on Climate Change (UNFCCC) and the 2016 Paris Climate Agreement marked the latest step in the development of the UN regime with a central objective is to keep the increase in global average temperature to well below 2°C above pre-industrial levels and to aim to limit the increase to 1.5°C. The UK formally ratified the agreement in December 2016, signalling major commitment to being part of a global effort to curb the effects of climate change.
- 4.3. The Climate Change Act 2008 established long term statutory targets for the UK to achieve an 80% reduction in greenhouse gases by 2050 against a 1990 baseline. However, following the Government's declaration of an 'Environment and Climate Emergency' in May 2019, they committed the UK to achieving net zero greenhouse gas emissions by 2050.
- 4.4. The Committee on Climate Change (CCC) advised that to meet this new target, the UK will require substantial amounts of new, low carbon power sources to be built before 2050, up to four times that of today's levels. Additionally, the CCC have just published the Sixth Carbon Budget, which details that in order to meet the UKs target of net-zero, the UK will have to reduce its emissions by 73% by 2035. As a result, renewable energy projects are vital.

#### LOCAL PLANNING POLICY

- 4.5. The Rushcliffe Local Plan Part 1: Core Strategy<sup>1</sup> was adopted in December 2014 and is a long-term plan to regenerate the Borough by outlining where, and how many, new homes, infrastructure, and jobs will be created. In support of the Core Strategy, development management policies with additional details, are set out in the Local Plan Part 2: Land and Planning Policies<sup>2</sup>, adopted in October 2019.
- 4.6. Relevant policies within the Core Strategy and Land and Planning Policies (LPP) documents that have been considered as part of the Proposed Development are outlined below:

Core Strategy Policy 1: Presumption in Favour of Sustainable Development

4.7. Policy 1 states "When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the



<sup>&</sup>lt;sup>1</sup> 9 Local Plan Part 1 Rushcliffe Core Strategy.pdf

<sup>&</sup>lt;sup>2</sup> Rushcliffe LP Part 2\_Adoption version.pdf

National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area."

#### Core Strategy Policy 2: Climate Change

- 4.8. Policy 2 stresses the importance of all proposals mitigating against and adapting to climate change, as well as complying with national and local targets on reducing carbon emissions and energy use. It goes on to state "Development should demonstrate how carbon dioxide emissions have been minimised in accordance with the following energy hierarchy:
  - a) Using less energy through energy efficient building design and construction, including thermal insulation, passive ventilation and cooling;
  - b) Utilising energy efficient supplies, including connection to available heat and power networks:
  - c) Maximising use of renewable and low carbon energy systems"
- 4.9. While this does not reference solar farms, it does advocate the transition to a low carbon future.
- 4.10. Subsection 5 of Policy 2 notes "The extension of existing or development of new decentralised, renewable and low-carbon energy schemes appropriate for Rushcliffe will be promoted and encouraged, including biomass power generation, combined heat and power, wind, solar and micro generation systems, where these are compatible with environmental, heritage, landscape and other planning considerations."
- 4.11. The Proposed Development aligns with Core Strategy Policies 1 and 2 as it would play a key role in helping to secure radical reductions in greenhouse gas emissions, minimise vulnerability and provide resilience to the impacts of climate change. This is considered central to economic, social, and environmental dimensions of sustainable development.
- 4.12. Subsections 6 10 of Policy 2 relate to Flood Risk and Sustainable Drainage. It states "Development proposals that avoid areas of current and future flood risk and which do not increase the risk of flooding elsewhere and where possible reduce flood risk, adopting the precautionary principle to development, will be supported." And "All new development should incorporate measures to reduce surface water run-off, and the implementation of Sustainable Drainage Systems into all new development will be sought unless it can be demonstrated that such measures are not viable or technically feasible".

#### LPP Policy 17: Managing Flood Risk

4.13. Policy 17 claims "Development proposals in areas of flood risk will only be considered when accompanied by a site specific flood risk assessment. Proposals will be expected to include



- mitigation measures which protect the site and manage any residual flood risk, such as flood resistance/resilience measures and the provision of safe access and escape routes."
- 4.14. The Site is wholly within Flood Zone 1 (at little to no risk of flooding), where a development of this type is deemed appropriate. There is some very minor surface water flooding identified on the Site, however a Flood Risk Assessment (FRA) and a Drainage Impact Assessment (DIA) will be submitted with the planning application. With sound design, flooding is not anticipated to be a constraint. The SUDS management train will be applied as appropriate.

#### LLP Policy 16: Renewable Energy

- 4.15. This policy claims "Proposals for renewable energy schemes will be granted planning permission where they are acceptable in terms of:
- 4.16. a) compliance with Green Belt policy:
- 4.17. b) landscape and visual effects;
- 4.18. c) ecology and biodiversity;
- 4.19. d) best and most versatile agricultural land; e) the historic environment;
- 4.20. f) open space and other recreational uses;
- 4.21. g) amenity of nearby properties;
- 4.22. h) grid connection;
- 4.23. i) form and siting;
- 4.24. j) mitigation;
- 4.25. k) the decommissioning and reinstatement of land at the end of the operational life of the development;
- 4.26. I) cumulative impact with existing and proposed development;
- 4.27. m) emissions to ground, water courses and/or air;
- 4.28. n) odour;
- 4.29. o) vehicular access and traffic; and
- 4.30. p) proximity of generating plants to the renewable energy source"
- 4.31. The Site in question is considered to be well located for the Proposed Development. The reasons for this are outlined above in paragraph 2.8 above. Although further assessment of the Site is yet to be undertaken, it is not anticipated that the Proposed Development will result in any significant environmental effects at any stage of the development, however comprehensive documentation will be submitted in support of the planning application.



#### Core Strategy Policy 11: Historic Environment

4.32. Policy 11 states "Proposals and initiatives will be supported where the historic environment and heritage assets and their settings are conserved and/or enhanced in line with their interest and significance. Planning decisions will have regard to the contribution heritage assets can make to the delivery of wider social, cultural, economic and environmental objectives."

#### Policy 28: Conserving and Enhancing Heritage Assets

4.33. Policy 28 states "Proposals that affect heritage assets will be required to demonstrate an understanding of the significance of the assets and their settings, identify the impact of the development upon them and provide a clear justification for the development in order that a decision can be made as to whether the merits of the proposals for the site bring public benefits which decisively outweigh any harm arising from the proposals."

#### Policy 29: Development affecting Archaeological Sites

- 4.34. Policy 29 stipulates that "Where development proposals affect sites of known or potential archaeological interest, an appropriate archaeological assessment and evaluation will be required to be submitted as part of the planning application. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them."
- 4.35. It goes on to say "Where archaeological remains of significance are identified permission will only be granted where:
  - a) The archaeological remains will be preserved in situ through careful design, layout and siting of the proposed development; or
  - b) When in-situ preservation is not justified or feasible, appropriate provision is made by the developer for excavation, recording and for the post-excavation analysis, publication, and archive deposition of any findings (to be undertaken by a suitably qualified party), provided that it can be clearly demonstrated that there are wider public benefits of the development proposal which outweigh harm to heritage assets of archaeological interest in line with NPPF requirements."
- 4.36. There are no designated heritage sites that lie inside the Proposed Development Site. However, there are three non-designated sites within the local Historic Environment Record (HER) recorded inside the Site boundary. There are several designated assets in the surrounding areas, including Listed Buildings, Scheduled Monuments and Historic Parks and Gardens that may be vulnerable to visual/indirect effects. A full Cultural Heritage Impact Assessment will be carried out to assess any identified heritage sites in detail and determine the potential direct or indirect effects (if any) resulting from the Proposed Development within the Proposed Development Site.



#### Core Strategy Policy 16: Green Infrastructure, Landscape, Parks and Open Spaces

- 4.37. Policy 16 stresses the importance of green infrastructure and open space in the borough. It notes that developments will only be approved where "existing and potential Green Infrastructure corridors and assets are protected and enhanced".
- 4.38. It also notes "where new development has an adverse impact on Green Infrastructure corridors or assets, alternative scheme designs that have no or little impact should be considered before mitigation is provided (either on site or off site as appropriate). The need for and benefit of the development will be weighed against the harm caused" and states that development proposals should ensure that "Landscape Character is protected, conserved or enhanced where appropriate in line with the recommendations of the Greater Nottingham Landscape Character Assessment."

#### Policy 34: Green Infrastructure and Open Space Assets

- 4.39. Policy 34 states "Where a proposal would result in the loss of Green Infrastructure which is needed or will be needed in the future, this loss should be replaced by equivalent or better provision in terms of its usefulness, attractiveness, quantity and quality in a suitable location. Replacement Green Infrastructure should, where possible, improve the performance of the network and widen its function."
- 4.40. A detailed Landscape and Visual Appraisal (LVA) will be undertaken as part of the assessment of the Proposed Development, however effects on the landscape fabric of the Proposed Development Site and landscape character of the wider area are likely to be <u>very localised</u>. Inward and outward views are largely limited by the existing surrounding woodland and hedgerows, however, the careful siting of the Proposed Development and the introduction of mitigation screen planting will further screen and filter potential residential views. Significant effects on residential visual amenity is considered unlikely. A very <u>small</u>, <u>localised</u> part of the wider Green Belt area will experience direct landscape effects from the introduction of the Proposed Development.
- 4.41. Additionally, as mentioned above, it is anticipated that the benefits of renewable energy production and net biodiversity gain from the Proposed Development will outweigh any potential negative impacts on green infrastructure. It be noted that the project is fully reversible, and the site can therefore be reinstated back to its greenfield state in the future.

#### Core Strategy Policy 17: Biodiversity

- 4.42. Policy 17 has been put in place with the aim of achieving biodiversity net gain over the Core Strategy period. The Council aim to do this by:
  - "a) protecting, restoring, expanding and enhancing existing areas of biodiversity interest, including areas and networks of priority habitats and species listed in the UK and Nottinghamshire Local Biodiversity Action Plans;



- b) ensuring that fragmentation of the Green Infrastructure network is avoided wherever possible and improvements to the network benefit biodiversity, including at a landscape scale, through the incorporation of existing habitats and the creation of new habitats;
- c) seeking to ensure new development provides new biodiversity features, and improves existing biodiversity features wherever appropriate;
- d) supporting the need for the appropriate management and maintenance of existing and created habitats through the use of planning conditions, planning obligations and management agreements; and
- e) ensuring that where harm to biodiversity is unavoidable, and it has been demonstrated that no alternative sites or scheme designs are suitable, development should as a minimum firstly mitigate and if not possible compensate at a level equivalent to the biodiversity value of the habitat lost.
- 4.43. The Policy also stipulates that "Designated national and local sites of biological or geological importance for nature conservation will be protected in line with the established national hierarchy of designations and the designation of further protected sites will be pursued." And "Development on or affecting other, non-designated sites or wildlife corridors with biodiversity value will only be permitted where it can be demonstrated that there is an overriding need for the development and that adequate mitigation measures are put in place."

#### LPP Policy 36: Designated Nature Conservation Sites

- 4.44. Policy 36 notes that "Development likely to have an adverse effect on a Site of Special Scientific Interest (either directly or indirectly, or individually or in combination with other developments) will not normally be permitted." and "Where an adverse effect on the site's notified features is likely, an exception should only be made where the benefits of the development's location, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest."
- 4.45. In terms of locally designated sites, the policy states "Development likely to have a significant adverse effect on a site of local nature conservation value will not be permitted unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the essential nature conservation value of the site."
- 4.46. The Site itself is free of any statutory designations, with the no Natura 2000 Sites within 15km. There are however five Sites of Special Scientific Interest (SSSI) within 5km; the nearest being Rushcliffe Golf Course which is approximately 220m southeast of the Site. An extended Phase 1 Habitat Survey with protected species scoping will be carried out when assessing the Site. Along with this a full Ecological Impact Assessment (EcIA) will be undertaken and will include suitable mitigation and enhancement measures to ensure that the Proposed Development will not significantly impact upon any ecological features.



#### LPP Policy 37: Trees and Woodland

- 4.47. Policy 37 states "Adverse impacts on mature tree(s) must be avoided, mitigated or, if removal of the tree(s) is justified, it should be replaced. Any replacement must follow the principle of the 'right tree in the right place". It then goes on to state that "wherever tree planting would provide the most appropriate net-gains in biodiversity, the planting of additional locally native trees should be included in new developments. To ensure tree planting is resilient to climate change and diseases a wide range of species should be included on each site"
- 4.48. A tree survey and subsequently an arboricultural impact assessment will be carried out as part of the planning application and a Landscape and Ecology Management Plan (LEMP) will be produced to minimise any potential negative effects arising from the Proposed Development, while increasing habitat diversity by way of mitigation planting, including native trees and hedgerows as well as species rich grasslands.

LPP Policy 38: Non-Designated Biodiversity Assets and the Wider Ecological Network.

- 4.49. Policy 38 states "Where appropriate, all developments will be expected to preserve, restore and re-create priority habitats and the protection and recovery of priority species in order to achieve net gains in biodiversity".
- 4.50. A Biodiversity Management Plan (BMP) will also be produced and the ecological enhancement of the land within the Proposed Development boundary is anticipated to increase the Site's capability for supporting wildlife through generation of renewable energy. These measures will result in a net-gain for biodiversity, in line with LLP Policy 38.

#### Carbon Displacement

4.51. Subject to final design, the solar farm is anticipated to generate renewable energy for the equivalent of circa 15,000 homes. The expected CO<sub>2</sub> displacement is circa 21,500 tonnes per annum<sup>3</sup>. The Proposed Development would therefore make a valuable contribution to the Councils progress in meeting its renewable energy targets, as well as assisting in meeting national targets.

<sup>&</sup>lt;sup>3</sup> For every 5MW installed, a solar farm will power over 1,515 homes annually (based on an average annual consumption of 3,300 kWh of electricity for a house) and save 2,150 tonnes of CO2



# 5. LANDSCAPE AND VISUAL

5.1. Based on a non-EIA development a Landscape and Visual Appraisal (LVA) following the principles of Landscape and Visual Assessment (LVIA) will be undertaken in accordance with GLVIA3<sup>4</sup>. This will assess the potential direct and indirect effects of the Proposed Development upon the landscape resources and visual receptors within a 5km radius study area from the boundaries of the site.

#### LANDSCAPE BASELINE

- 5.2. The Proposed Development Site is located within the Rushcliffe Borough Council area. The Option Area is not located within nor close to any national or locally designated landscapes.
- 5.3. The Proposed Development Site lies between the small settlements of Hawksworth (0.1km west) and Thoroton (0.3km southeast) and covers an area of low lying lightly undulating agricultural land with an elevation range of c. 20m to 25m AOD. Internal field boundaries comprise, hedgerows, tree lines and linear strips of woodland shelter belt. External boundaries largely consist of mature to lower hedgerows with individual trees and some evident gaps. In terms of existing electricity infrastructure, a pylon line passes through the eastern side of the Proposed Development Site.
- 5.4. The Proposed Development Site is partly bound by Longhedge Lane, a minor road on the north eastern boundary, and a minor road on the southern boundary (located between Hawksworth and Thoroton).

#### Landscape Character

- 5.5. The landscape of the Option Area falls within the Trent and Belvoir Vales National Landscape Character Area (NCA). At a county level, the Greater Nottingham Landscape Character Assessment (2009) provides classification of Landscape Character Types (LCTs). Five landscape character areas have been identified within Rushcliffe Borough, which are subdivided into 14 Draft Policy Zones (DPZs).
- 5.6. At a more detailed level, the Melton and Rushcliffe Landscape Sensitivity Study: Wind Energy Development, divides the Borough's landscape into Landscape Character Assessment Units (LCUs)<sup>5</sup> informed by the 2009 DPZs. It should be noted that this study does not account for solar development but does provide more detailed information on landscape character, landmarks, views, and sensitivity. The Proposed Development Site is located within LCU 25: South Nottinghamshire Farmlands: Aslockton Village Farmland.

<sup>&</sup>lt;sup>5</sup> LUC (2014) Melton and Rushcliffe Landscape Sensitivity Study: Wind Energy Development



<sup>&</sup>lt;sup>4</sup> Landscape Institute and the Institute of Environmental Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)

- 5.7. The 2009 Greater Nottingham Landscape Character Assessment and the 2014 Landscape Sensitivity Study will be used to inform the iterative design process and will form the basis for the assessment of landscape effects.
- 5.8. Overall, it is considered unlikely that the landscape of the Proposed Development Site would be particularly sensitive to the type of development proposed.

#### VISUAL BASELINE

5.9. The potential visibility of the Proposed Development will be largely limited to localised receptors (people) due to the relatively low-lying landform, screening by existing field boundary vegetation and the low height of the Proposed Development.

#### Residential Visual Amenity

5.10. Although potential effects on the residential visual amenity of Hawksworth and Thoroton will be considered as part of the appraisal process, it is anticipated that views looking towards the Proposed Development Site from the nearby settlements will be largely screened by intervening field boundary vegetation, as will residential views from any nearby individual properties and farmsteads.

#### **Transport Routes**

5.11. Inward views from transport routes are largely limited to those experienced from a short sections of Longhedge Lane partly on the northeast boundary, and the minor roads partly on the north-eastern and southern boundaries of the Proposed Development Site. Potential views will be largely limited to intermittent gaps through field boundary vegetation and where the hedgerow is less robust near the intersection of the roads to the northeast. Potential effects on transient receptors on the local road network will be considered as part of the LVA process.

#### **Recreational Routes**

- 5.12. Potential visual receptors will include users of the Bridleway which passes through the northern part of the Proposed Development Site and the Bridleway and PRoW in closest proximity to the east, in addition to the PRoW to the south and south west between Hawksworth and Thoroton.
- 5.13. Consideration will also be given to National Cycle Network (NCN) route 64 which shares the minor road on the east side of the Proposed Development Site.



#### **Cumulative Context**

5.14. Operational solar farms; Lodge Farm and Elton Solar Farm are located c. 2.2km and 2.7km to the southeast respectively.

#### LANDSCAPE AND VISUAL EFFECTS

- 5.15. Effects on the landscape fabric of the Proposed Development Site and the South Nottinghamshire Farmlands: Aslockton Village Farmland LCU will be <u>localised</u>. Indirect effects on the wider geographical extent of this LCU and neighbouring landscapes are likely to be limited by the relatively low elevation of the site, screening by existing field boundary vegetation and the low height of the Proposed Development (circa 3m).
- 5.16. Views into the site from the nearby settlements are likely to be limited by intervening landform and vegetation. The careful siting of the Proposed Development and the introduction of mitigation screen planting will further screen and filter potential residential views. Significant effects on residential visual amenity are therefore considered unlikely.
- 5.17. Visual effects on recreational receptors are anticipated to be very localised and experienced from a short section of the Bridleway within the site and recreational routes in closest proximity, including the Bridleway to the east, PRoW to the south and southwest, and NCN route 64. From transient routes, inward views will be largely limited to those experienced through gaps in existing hedgerows and where vegetation is less robust, from short sections of Longhedge Lane (partly on the northeast boundary), and the minor roads (partly on the north-eastern and southern boundaries).
- 5.18. Mitigation measures will include native species hedgerow and tree planting to further integrate the Proposed Development sensitively with its surroundings and screen potential inward views. Potential for mixed land use including the introduction of possible biodiversity benefits such as wildflower meadows and interpretive information close to the Bridleway within the site will be explored as part of the iterative design process. However, it is considered unlikely that visual effects from a short section of this Bridleway could be fully mitigated.
- 5.19. Given the contained nature of the Proposed Development Site and that of the existing operational solar farms within c. 3km, cumulative interactions are anticipated to be largely limited. Any solar farms at the application stage, under construction or consented within the proposed 5km study area will also be considered within the appraisal of cumulative effects.
- 5.20. Overall significant landscape and visual effects resulting from the introduction of the Proposed Development on landscape and visual receptors are considered unlikely.



#### Agricultural Land Classification (ALC)

- 5.21. Agricultural Land Classification (ALC) is a system used in England to grade the quality of land for agricultural use, according to the extent by which physical or chemical characteristics impose long-term limitations.
- 5.22. Land classification within the Proposed Development is a mixture of Grade 2 and 3 (See Excerpt 1 below).

Excerpt 1: ALC of the Proposed Development Site at Thoroton.



- 5.23. It is not known at this stage whether the Grade 3 land is classified as Grade 3a or 3b.
- 5.24. While Grade 2 and 3a land is considered "Best and Most Versatile land", Natural England have outlined in previous solar farm consultation responses that such developments do <u>not result</u> in the permanent loss of land as the development only has an expected lifetime of c. 40 years.
- 5.25. Additionally, the proposal will be designed in such a way to avoid significant losses during the operational stage, with a circa 5% ground level footprint typical. Agriculture, in the form of sheep grazing, can continue on the other 95% of the land during the operational stage.
- 5.26. Solar panels will be driven into the ground by steel panels using a 'pin-prick effect' therefore, limiting soil disturbance and the site can be fully restored upon the cessation of the solar farm.
- 5.27. An Agricultural Land Classification (ALC) survey will supplement the planning application.



# 6. ECOLOGY

- 6.1. The Proposed Development Site does not lie within any statutory environmentally designated sites.
- 6.2. Within 15km of the Proposed Development Site, there are no Natura 2000 designated sites, proposed Natura 2000 sites or Ramsar Sites.
- 6.3. There is one Site of Special Scientific Interest (SSSI) within 5km, namely Orston Plaster Pits SSSI, located approximately 2.5km south of the Proposed Development Site. This SSSI comprises one of the best mixed-habitat sites in Nottinghamshire and contains examples of neutral and calcareous grassland and eutrophic open water communities. There are no National Nature Reserves (NNRs) or Local Nature Reserves (LNRs) within 5km of the Proposed Development Site.
- 6.4. The single designated site has been identified within the Environmental Designations Map (Figure 4: Appendix A) and Table 5-1 below.

Table 6-1: Environmental Designations within 15km/5km Study Areas

| SITE NAME           | Distance (KM) | Designation |
|---------------------|---------------|-------------|
| Orston Plaster Pits | 2.5           | SSSI        |

- 6.5. The Proposed Development Site lies within Natural England Impact Risk Zones associated with Orston Plaster Pits SSSI. However, solar energy applications this distance from the SSSI are not listed as needing specific consultation with Natural England. Given the relatively low-impact nature of solar proposals in biodiversity terms, and the fact that the Proposed Development Site is separated from the SSSIs by agricultural land (of likely low ecological value), significant impacts upon this or any other designated site are not anticipated.
- 6.6. Two small areas of the UK Priority habitat deciduous woodland are present adjacent to the Proposed Development Site. Appropriate buffer zones will be put in place to avoid adverse impacts as much as possible.
- 6.7. An Ecological Impact Assessment (EcIA) report will be produced and submitted with the application to assess the potential direct and indirect effects of the Proposed Development upon local ecology. This allows for the identification of potential ecological effects and the compilation of appropriate mitigation measures where applicable.
- 6.8. The EcIA report shall be produced in accordance with EU and National guidance and regulations and the Chartered Institute of Ecology and Environmental Management's (CIEEM) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (2019 update). A Phase 1 habitat survey will be undertaken to inform the EcIA and to produce a map and target note of the habitats and vegetation. Habitats will be classified according to the standard JNCC habitat types.



- 6.9. A protected species scoping survey will also be undertaken at the same time as the Phase 1 habitat survey, to identify potential field signs of, or suitable habitat for, these species. The local area contains multiple ponds and ditches. Two of the ponds fall within 500m of the Proposed Development Site,
  - with follow-up surveys undertaken during the appropriate seasons, where required.
- 6.10. A Biodiversity Management Plan (BMP) and Landscape and Ecology Management Plan (LEMP) will also be produced to minimise any potential negative effects arising from the proposed development, while increasing the habitat diversity. The ecological enhancement of the land within the development boundary will increase the site's capability for supporting wildlife through generation of renewable energy. It is anticipated that these measures will result in a net gain for biodiversity, in accordance with Core Strategy Policy 17of the Rushcliffe Local Plan Part 1.
- 6.11. An Outline Construction Environmental Management Plan (OCEMP) will be developed and submitted as part of the planning application. This will outline best practice pollution prevention measures, and ensure hydrological systems within and close to the site are properly assessed and any effects mitigated.
- 6.12. Given the benign nature of solar farms and the opportunity for ecological enhancement, **no** significant adverse effects are anticipated.



# 7. CULTURAL HERITAGE & ARCHAEOLOGY

- 7.1. There are <u>no designated heritage assets recorded within the boundary of the Proposed Development Site</u>. The nearest designated asset is the Grade II listed building 'Hawksworth Manor & Pigeoncote' (1243799) located c. 220m to the west of the Application Site boundary.
- 7.2. Within 5km of the Proposed Development Site there are:

Eight Scheduled Monuments;

One Park and Garden of Special Historic Interest (Flintham Hall);

One Inventory Battlefield (Battle of Stoke 1487);

No Heritage Coasts; and

No World Heritage Sites.

7.3. Within 2km of the Proposed Development Site there are:

34 Listed Buildings, including four Grade I, two Grade II\* and 28 Grade II; and

Four Conservation Areas (Hawksworth, Thoroton, Scarrington and Orston).

- 7.4. See Figure 5: Appendix A for the locations of the above identified designated heritage assets. While none of the above sites lie inside the site boundary, a Cultural Heritage Impact Assessment (CHIA) will be completed in order to evaluate the potential indirect effects on surrounding designated heritage assets within the above study areas. This will assess indirect impacts in-depth, particularly for the Grade I listed buildings in close proximity to the site due to their sensitivity, but a cursory review suggests that no significant issues with indirect effects would be expected.
- 7.5. A review of non-designated sites within the Heritage Gateway online portal shows <u>several non-designated sites present inside the Proposed Development Site</u>. This includes two polygon features and five point features, with numerous further non-designated sites in the immediate vicinity. These sites largely represent light industrial and agricultural usage of the land dating to the post-medieval period. As a result, the land has notable archaeological potential dating to this period, but such remains would be expected to be of low significance and sensitivity. However, this resource is not guaranteed to be accurate or up-to-date and full HER data will require purchase from the Nottinghamshire Historic Environment Record.
- 7.6. From this cursory review, the overall Proposed Development Site is considered to have a moderate archaeological potential associated with the post-medieval period but no specific indications for remains associated with other periods. Consultation with historic OS maps similarly shows that the land has been consistently within agricultural usage over the last c.



- 150 years, containing features of low significance such as drainage ditches and footpaths, but little else of archaeological interest.
- 7.7. A detailed Cultural Heritage Impact Assessment will be produced as part of the planning application and will assess potential direct and indirect effects upon non-designated heritage assets within a 1km study area, as well as appraise the archaeological potential of land within the proposed development site in detail, and assess the potential for direct impacts upon hitherto-unknown sub-surface features likely to be present.

### 8. HYDROLOGY

- 8.1. The Proposed Development Site is mostly contained within Flood Zone 1 (at little or no risk of fluvial or tidal / coastal flooding) (see Appendix B). There are some large areas of Flood Zone 2 and 3 which follow the watercourse/drains within the site and these will be considered carefully during the design phase. Detailed flood risk data has been requested from the Environment Agency to identify flood depths to determine if there are areas within the flood zones where panels can be located. All grid infrastructure buildings will be located within Flood Zone 1.
- 8.1. In addition, there are a number of surface water issues throughout the Application Site, however most of this flooding looks to be relatively shallow (less than 300mm). This will be investigated thoroughly and any issues will be mitigated with careful design and therefore flood risk is not anticipated to be a significant issue.
- 8.2. A Flood Risk Assessment (FRA) will be included with the planning application including a desk-based assessment to determine the existing site conditions (geology, hydrology and hydrogeology), and will include calculations on increased surface water runoff as a result of the Proposed Development. These calculations will be utilised to design the site drainage and this will be contained in a Drainage Impact Assessment (DIA).

# 9. ACOUSTICS

- 9.1. There is limited noise generated from solar farms. Solar panels themselves do not generate noise. The main noise source associated with a solar farm development will be the inverter stations. The inverter stations have fans inside which cool the invertors during times of operation.
- 9.2. There is a limited number of noise sensitive receptors surrounding the site boundary; however, a Noise Impact Assessment (NIA) will be produced and submitted with the planning application to confirm there will be no noise limit exceedance. With good design, it is anticipated that noise will not be an issue.



# 10. TRAFFIC AND ACCESS

- 10.1. Access to the Proposed Development Site is yet to be confirmed, however there are four potential options surrounding the site which are already existing farm entrances; all of which appear to have good visibility at present, however this would be confirmed during the design process.
- 10.2. The operational phase of the Proposed Development is anticipated to have negligible trip generation potential with approximately one Light Goods Vehicles (LGVs) expected once per month for scheduled maintenance checks, with additional visits required to attend to remedial issues when necessary.
- 10.3. A Construction Traffic Management Plan (CTMP) will be provided to support the planning application. This will include swept path analysis at the site entrance point once it has been identified, identification of the best route to site and any measures required for safe access to the site throughout the construction and operational phases.

### 11. GLINT & GLARE

- 11.1. A ground-based and aviation receptor Glint and Glare Assessment will be produced and submitted with the planning application.
- 11.2. Solar panels are designed to absorb as much light as possible and not to reflect it. However, glint can be produced as a reflection of the sun from the surface of the solar PV panel. This can also be described as a momentary flash.
- 11.3. Glare is significantly less intense in comparison to glint and can be described as a continuous source of bright light, relative to diffused lighting. This is not a direct reflection of the sun, but a reflection of the sky around the sun.
- 11.4. Glint is most likely to impact upon a ground-based receptor close to dusk and dawn, when the sun is at its lowest in the sky. Therefore, any effect would likely occur early in the day or late in the day, reflected to the west at dawn and east at dusk. Areas to the south and north of the Proposed Development can be discounted due to the relative location of the sun when reflections are close to ground level.
- 11.5. There are a number of residential receptors within 1km of the Proposed Development Site, with the majority being in the two villages of Hawksworth and Thoroton. Most of the receptors appear to be well screened however, it is likely that some form of mitigation will be required. With the implementation of mitigation planting, significant effects are not anticipated.



- 11.6. All Public roads, with the exception of Longhedge Lane and the unnamed road that runs from east to west on the southern side of the Proposed Development, within the vicinity of the Proposed Development Site appear to be well screened. Impacts on Longhedge Lane and the unnamed road are likely to come when the sun is setting and is low in the sky. However, with mitigation planting, effects are not anticipated to be significant.
- 11.7. There is one railway line located to the south of the Proposed Development, however this is outside the 1km study area. At this distance the railway line will not be affected and will therefore not require detailed assessment. In any event, it is not anticipated that glint and glare will have a significant effect on rail users due to the distance and orientation in relation to the Proposed Development.
- 11.8. There are two aviation assets located close by which would require assessment. These aviation assets are; RAF Syerston which is located circa 4km northwest of the Proposed Development and Nottingham City Airport which is located circa 14.5km southwest of the Proposed Development. Due to the orientation and distance of these assets from the Proposed Development it is not anticipated that glint and glare will result in a significant effect for aviation assets.
- 11.9. Although no significant effects are anticipated, communication with the landscape consultant will be sought in order to further reduce any effects on ground-based receptors in the form of a Landscape and Ecology Management Plan (LEMP).

# 12. OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- 12.1. As outline in the ecology section above an Outline Construction Environmental Management Plan (OCEMP) will support the planning application which would be prepared with reference to the environmental assessments undertaken as part of the planning application.
- 12.2. The OCEMP ensures that any potential pollution or other construction effects on sensitive habitats and hydrological systems within and close to the site are properly assessed and mitigated. Best practice pollution prevention measures and guidance is considered as part of this assessment.



# 13. CONCLUSION

- 13.1. The Proposed Development is for the construction, operation, maintenance and decommissioning of a ground mounted solar scheme with a maximum export capacity of 49.9MW. The Proposed Development has the capacity to generate renewable energy for the equivalent of c. 15,000 homes and displace c. 21,500 tonnes of CO<sub>2</sub> per annum, contributing greatly to not only Rushcliffes progress in meeting their own renewable targets but also in meeting the UKs target of net zero carbon emissions by 2050.
- 13.2. The Proposed Development Site is not located within, nor close to any nationally or locally designated landscapes.
- 13.3. The potential visibility of the Proposed Development will be largely limited to localised receptors and experienced only from short sections of the PRoWs within and adjoining the site due to the relatively low-lying landform, screening by existing field boundary vegetation and the low height of the Proposed Development (c. 3.0m). The addition of mitigation planting will further aid in integrating the Proposed Development and reduce overall visibility. Due to limited potential views, it is considered that visual effects will not be significant.
- 13.4. Given the contained nature of the Proposed Development Site and that of the existing operational solar farms within c. 3km, cumulative interactions are anticipated to be largely limited.
- 13.5. The land of the Proposed Development is classified as a mixture of Grades 2 and 3. While grades 2 and 3a are considered "best and most versatile land", grade 3b is considered appropriate for solar development. It cannot be determined which Grade 3 the land is currently. An ALC survey will supplement the planning application, however there will be a very limited loss of agricultural land (circa 5%) for the operational stage and the site can be fully restored upon the cessation of the solar farm. Agriculture, in the form of sheep grazing, can continue on the other 95% of the land during the operational stage.
- 13.6. Within 15km of the Proposed Development Site, there are no Natura 2000 designated sites, proposed Natura 2000 sites or Ramsar Sites.
- 13.7. There is one Site of Special Scientific Interest (SSSI) within 5km, namely Orston Plaster Pits SSSI, located approximately 2.5km south of the Proposed Development Site. An Ecological Impact Assessment (EcIA) report will be produced and submitted with the application, providing an ecological baseline for the site and local area. Due to the benign nature of solar farms, no significant effects are anticipated.
- 13.8. A Biodiversity Management Plan (BMP) will also be produced to outline the specific objectives for biodiversity and the means by which these objectives will be achieved. This will include the protection of existing species and habitats, the introduction of specific enhancements, and the maintenance and monitoring of these. With the proposed BMP the site is anticipated to be enhanced significantly for ecology, resulting in a net gain for biodiversity.



- 13.9. There are no designated heritage assets recorded within the Proposed Development Site, however there are several non-designated sites present inside the site. These sites largely represent light industrial and agricultural usage of the land dating to the post-medieval period. As a result, the land has notable archaeological potential dating to this period, but such remains would be expected to be of low significance and sensitivity.
- 13.10. A detailed Cultural Heritage Impact Assessment will be produced as part of the planning application and will assess potential direct and indirect effects upon non-designated heritage assets within a 1km study area, as well as appraise the archaeological potential of land within the Proposed Development Site in further detail, and assess the potential for direct impacts upon hitherto-unknown sub-surface features likely to be present.
- 13.11. The Proposed Development Site is mostly contained within Flood Zone 1 (at little or no risk of flooding), however there are some large areas of Flood Zones 2 and 3 which follow the watercourse / drains within the site. Detailed flood risk data has been requested from the Environment Agency to identify flood depths to determine if there are areas within the flood zones where panels can be located. All grid infrastructure buildings will be located within Flood Zone 1.
- 13.12. There are a number of surface water issues throughout the Application Site, however most of this appears to be relatively shallow and any issues will be mitigated with careful design, therefore flood risk is not anticipated to be a significant issue.
- 13.13. There is a limited number of noise sensitive receptors surrounding the Proposed Development Site, however a Noise Impact Assessment (NIA) will be submitted with the planning application and with good design, it is not anticipated that noise will be an issue.
- 13.14. A ground-based receptor glint and glare assessment will be produced and submitted with the planning application for the Proposed Development. Although no significant effects are anticipated, communication with the landscape consultant will be sought in order to further reduce effects on ground-based receptors. No licensed aviation assets close by which would require assessment.
- 13.15. From an initial desk-based assessment, the Proposed Development Site appears to be suitable to accommodate the Proposed Development and with a high-quality design, a development of this nature is entirely consistent with planning policy adopted by Rushcliffe Borough Council.
- 13.16. The temporary and reversible nature of the Proposed Development, coupled with the measures that are to be taken to enhance the landscape and encourage the ecological diversity of the site will ensure that upon decommissioning, the site can not only be restored to its current agricultural use, but will also have been improved. The wider environmental benefits and sustainability credentials associated with the generation of renewable energy represents a significant case in favour of the Proposed Development.



# 14. APPENDICES

#### APPENDIX A – LIST OF FIGURES

Figure 1: Site Location Map

Figure 2: Field Numbers

Figure 3: National Landscape Character Areas (NCA) Map

Figure 4: Environmental Designations Map

Figure 5: Designated Heritage Assets Map

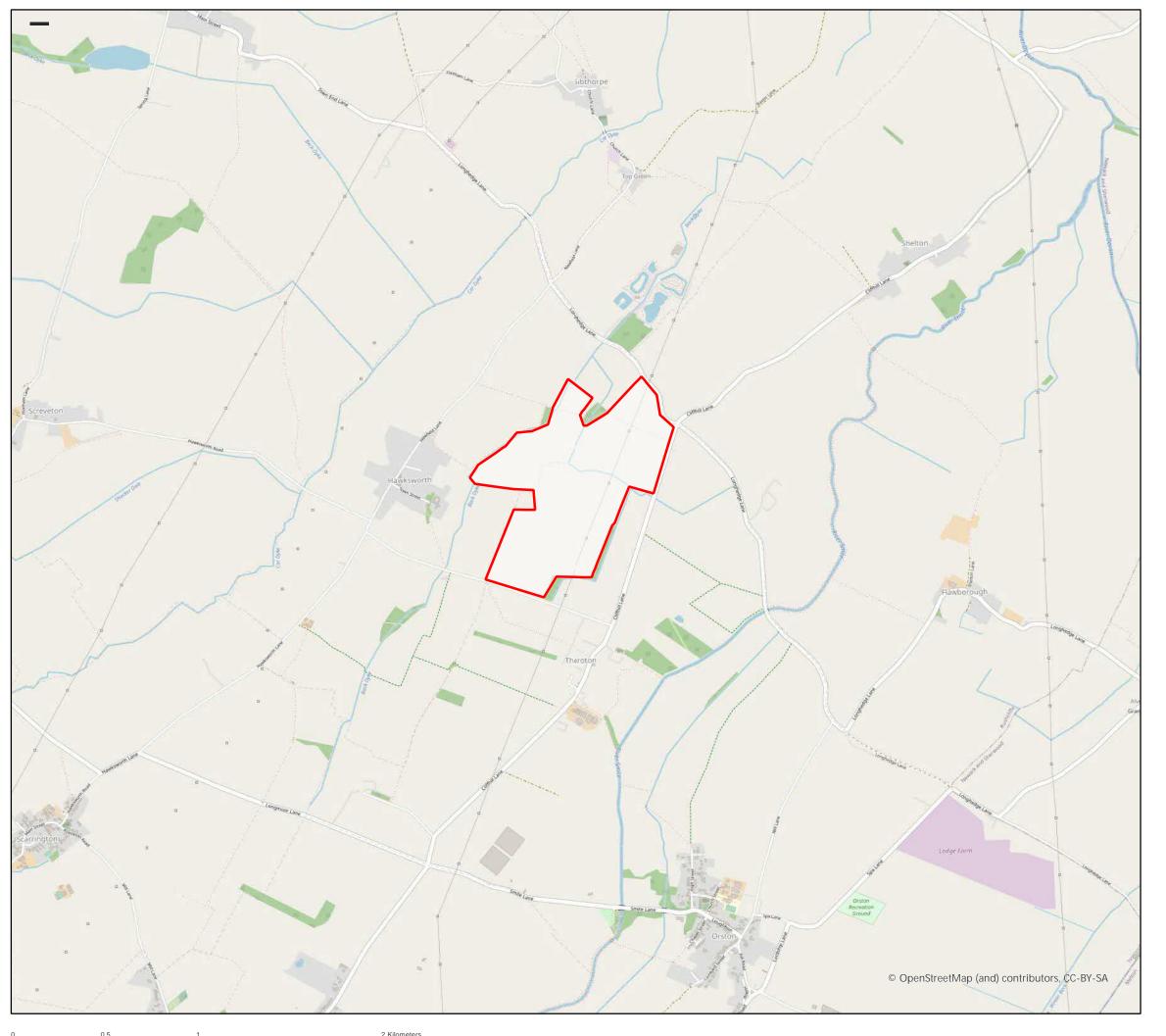
APPENDIX B: FLOOD MAP FOR PLANNING





# Appendix A- Figures



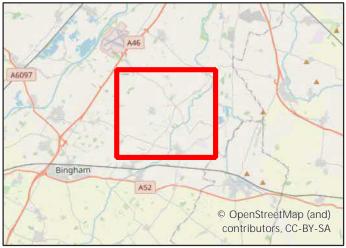


# Thoroton Solar Farm Site Location Map Figure 1

Key

Development Boundary

Neo Office Address: Wright Business Centre, 1 Lonmay Road, Glasgow, G33 4EL



Contains Ordnance Survey data © Crown copyright and database right 2019

Date: 04/01/2021 Drawn By: Scott Griffin Scale (A3): 1:20,000 Drawing No: NEO00782/001I/A



# 2 3 1 5 Maxar, Microsoft

# Thoroton Solar Farm Field Numbers Figure 2

Key

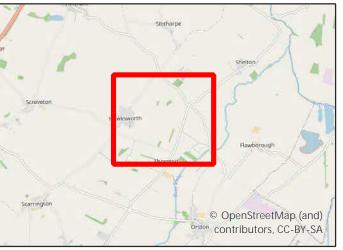
Development Boundary

---- PROW

---- Bridleway

NCN Route

Neo Office Address: Wright Business Centre, 1 Lonmay Road, Glasgow, G33 4EL



Date: 13/01/2021 Drawn By: Jamie McGhee Scale (A3): 1:7,500 Drawing No: NEO00782/002I/B



# Thoroton Solar Farm National Landscape Character Areas (NCA) Map Figure 3

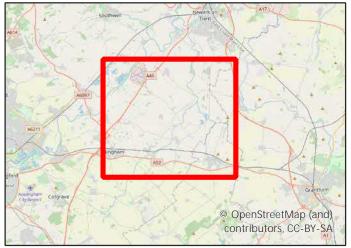
Key

Development Boundary

2km, 5km Study Area

Trent and Belvoir Vales NCA

Neo Office Address: Wright Business Centre, 1 Lonmay Road, Glasgow, G33 4EL



Contains Ordnance Survey data © Crown copyright and database right 2019

Date: 04/01/2021 Drawn By: Scott Griffin Scale (A3): 1:45,000 Drawing No: NEO00782/003I/A



1.25 2.5 5 Kilomet

# Bingham Lady Bay West Bridgford © OpenStreetMap (and) contributors, CC-BY-SA

15 Kilometers

# Thoroton Solar Farm Environmental Designations Figure 4



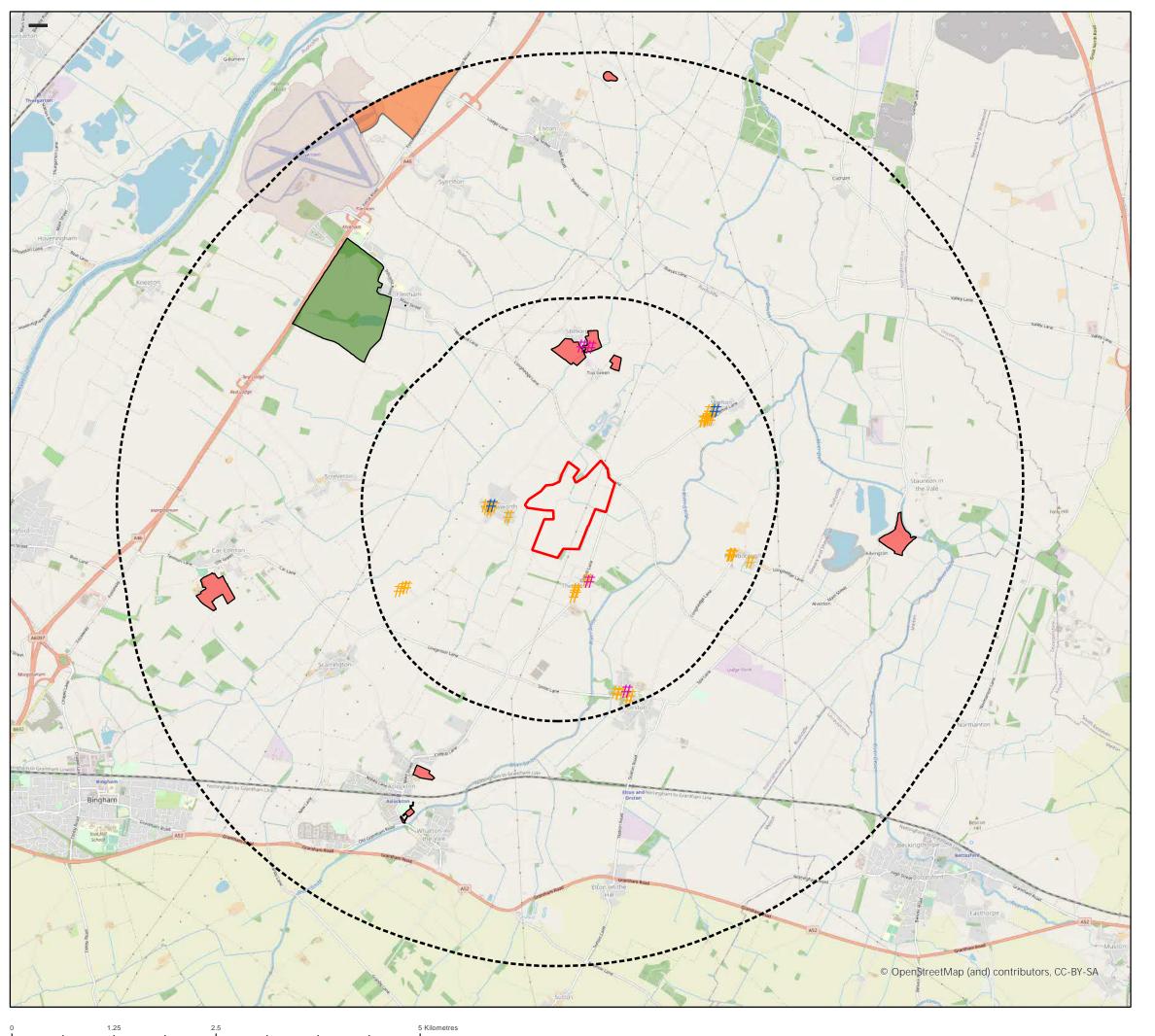
Neo Office Address: Wright Business Centre, 1 Lonmay Road, Glasgow, G33 4EL



Contains Ordnance Survey data © Crown copyright and database right 2019

Date: 14/12/2020 Drawn By: Scott Griffin Scale (A3): 1:125,000 Drawing No: NEO00782/00I/A





# Thoroton Solar Farm Designated Heritage Assets Figure 5



Development Boundary

2km/5km Study Area

# Grade II Listed Buildings

Grade II\* Listed Buildings

# Grade I Listed Buildings

Scheduled Monuments

Parks and Gardens of Special Historic Interest

Battlefields

Neo Office Address: Wright Business Centre, 1 Lonmay Road, Glasgow, G33 4EL



Contains Ordnance Survey data © Crown copyright and database right 2021

Date: 04/01/2021 Drawn By: Michael Briggs Scale (A3): 1:45,000 Drawing No: NEO00782/004I/B





# Appendix B – Flood Map for Planning





# Flood map for planning

Your reference Location (easting/northing) Created

Thoroton 476119/343640 4 Jan 2021 14:14

Your selected location is in flood zone 3, an area with a high probability of flooding.

#### This means:

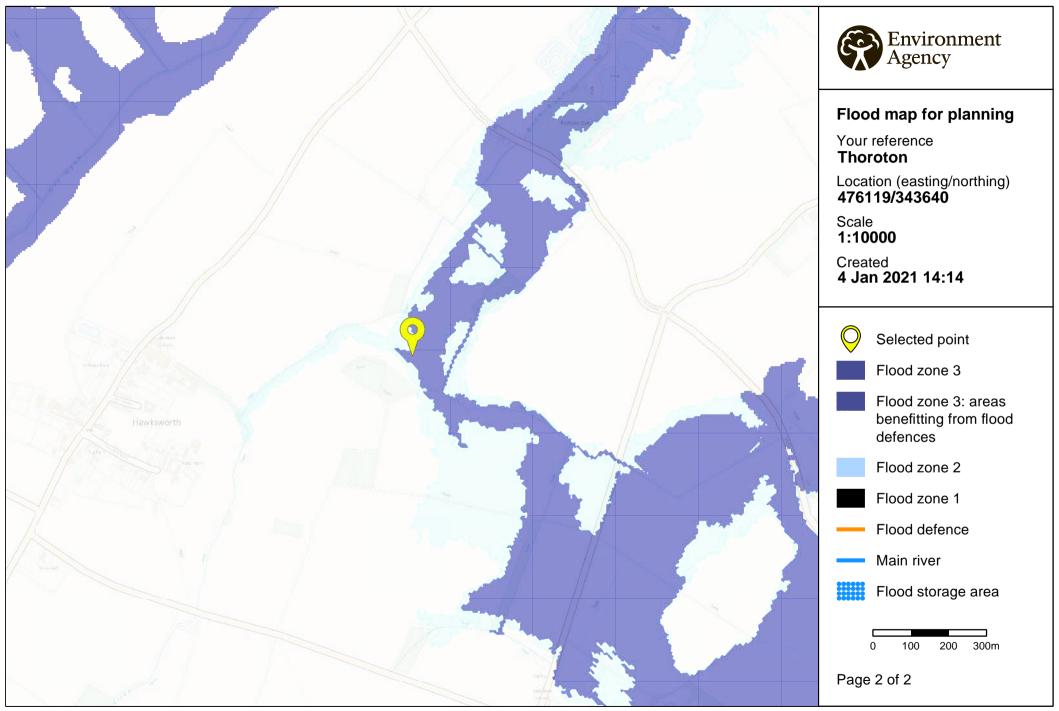
- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see www.gov.uk/guidance/flood-risk-assessment-standing-advice)

#### **Notes**

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

The Open Government Licence sets out the terms and conditions for using government data. https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/



© Environment Agency copyright and / or database rights 2018. All rights reserved. © Crown Copyright and database right 2018. Ordnance Survey licence number 100024198.



#### **HEAD OFFICE - GLASGOW**

Wright Business Centre, 1 Lonmay Road, Glasgow G33 4EL | T: 0141 773 6262 | W: www.neo-environmental.co.uk

#### N. IRELAND OFFICE **IRELAND OFFICE RUGBY OFFICE WARRINGTON OFFICE** Unit 3, The Courtyard Business Park Johnstown Business Centre **Valiant Office Suites** Cinnamon House, Cinnamon Park Gargorm Castle, Ballymena, Johnstown House, Naas Lumonics House, Valley Drive, Crab Lane, Fearnhead Northern Ireland Co. Kildare Swift Valley, Rugby, Warrington **BT42 1HL** T: 00 353 (0)45 844250 Warwickshire, CV21 1TQ Cheshire T: 0282 565 04 13 E: info@neo-environmental.ie T: 01788 297012 T: 01925 661 716 E: info@neo-environmental.co.uk W: neo-environmental.ie E: info@neo-environmental.co.uk E: info@neo-environmental.co.uk

When telephoning, please ask for:

Telephone no:

Email:

Our Reference: 21/00406/ADVICE

Your Reference: Date: 25<sup>th</sup> March 2021 Deirbhile Blair 0115 914 8342

**OFFICIAL** 



Email:

customerservices @rushcliffe.gov.uk

Telephone: 0115 981 9911

www.rushcliffe.gov.uk

#### Nicole Beckett Via email: <u>r</u>

Dear Nicole

Re: Proposed development of ground mounted solar farm.

I refer to the above enquiry for a solar farm on lands between Hawksworth and Thoroton, Nottinghamshire.

#### Site Constraints

The proposed development would be located within the open countryside. A Public Bridleway cuts across the site to the north. The land to the north is in Flood Zones 2 and 3. There is an area of small woodland to the north. Hawksworth Manor and adjoining Pigeoncote are Grade II Listed and are located directly to the west of the application site. The church of St Helena in Thoroton is Grade 1 listed and a number of other buildings in the village are also Listed buildings. The site is also in the vicinity of Conservation Areas of Hawksworth and Thoroton and parts of the site are acknowledged to have potential archaeological interest.

It has not been demonstrated clearly as to what grade of agricultural land the application site falls within.

There is no relevant planning history associated with this application site.

#### Planning policy

National Planning Policy Framework

 Chapter 14 Meeting the challenge of climate change, flooding and coastal change.

Rushcliffe Local Plan Part 1

- Policy 1 Presumption in favour of sustainable development
- Policy 2 Climate Change

Rushcliffe Local Plan Part 2

- Policy 1 Development Requirements
- Policy 16 Renewable Energy
- Policy 22 Development within the Countryside

National Planning Policy Guidance

Renewable and Low Carbon Energy

#### Principle of Development

In principle, the development of renewable and low carbon energy is acceptable in both national and local policy terms. In particular, paragraph 154 of the NPPF states that local planning authorities should (inter alia)

Postal address
Rushcliffe Borough
Council
Rushcliffe Arena
Rugby Road
West Bridgford
Nottingham
NG2 7YG



| " approv  | re the application if its impacts are (or can be made) acceptable"   |  |  |  |  |
|---|--|--|--|--|--|
| αρριον  | approve the application it its impacts are (or can be made) acceptable   |  |  |  |  |
|   | , providing, of course that any other impacts can be   |  |  |  |  |
| made acc  |  |  |  |  |  |
| Other Cor   | nsiderations experience of the second experien |  |  |  |  |
| It has not been clearly demonstrated as to what grade of land the application site lies within. In this instance, consideration must be given to part 12 of LPP2 Policy 1 which states that;  |  |  |  |  |  |
| "development should have regard to the best and most versatile agricultural classification of the land, with a preference for the use of lower quality over higher quality agricultural land. Development should also aim to minimise soil disturbance as far as possible."   |  |  |  |  |  |
| In addition, guidance is contained within the NPPG regarding large scale solar farms which states that where a proposal involves greenfield land it should be demonstrated;   |  |  |  |  |  |
| (i)   | the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and;  |  |  |  |  |
| (ii)  | the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.   |  |  |  |  |
|   | In this case, given the nature of the development, which requires reasonably low levels of ground disturbance/footings, i  |  |  |  |  |
|   | , however  |  |  |  |  |
| quality of farm.  | the land within each parcel may influence which fields are utilised for the solar  |  |  |  |  |
| It is noted that there are four potential access options surrounding the site which are existing farm entrances, however no further information has been provided. The comments from the Highways Authority have been noted and they have recommended that any application  |  |  |  |  |  |
|   | . It would have to be demonstrated that  |  |  |  |  |
| the i   |  |  |  |  |  |
| The proposal is not considered to be Schedule 1 development under the Environmental Impact Assessment Regulations 2017 The development is considered to be Schedule 2 development as it would comprise an industrial installation for the production of electricity on a site of 68.7 hectares which exceeds the threshold contained within Schedule 2 Section 3(a). In this instance, it will be necessary for the Borough Council to screen the application and it is recommended that a screening opinion request is submitted prior to any application being submitted https://www.legislation.gov.uk/uksi/2017/571/schedule/2/made |  |  |  |  |  |
| As advised by the Landscape Officer, any application would need to be accompanied by a Views from   |  |  |  |  |  |
| surrounding routes, roads, settlements, public rights of way and the listed convent will be key, as too will views from higher ground. An   |  |  |  |  |  |
|   | . Consideration should also be   |  |  |  |  |

| given to the cumulative visual impacts associated with existing solar farm in within the vicinity of the site.  | stallations     |  |  |  |  |
|---|-----------------|--|--|--|--|
| Any application must also be supported by the results of out by a suitably qualified and experienced ecologist,   | arried          |  |  |  |  |
| . Similarly,  |                 |  |  |  |  |
|   |                 |  |  |  |  |
| Given the close proximity of the solar panels to main roads, it is considered that the orientation and angle of the panels should be given careful consideration in order to limit/prevent issues of glint and glare for oncoming traffic.  |                 |  |  |  |  |
| It is noted that  |                 |  |  |  |  |
|   | . The           |  |  |  |  |
| Rights of Way Team at the County Council have provided comments to which criteria should be adhered to when submitting a formal planning application. Their comments are attached.  |                 |  |  |  |  |
| You may also wish to consider submitting a measures to li   | setting out     |  |  |  |  |
|   |                 |  |  |  |  |
| With regards to Flood Risk, to the north, t   |                 |  |  |  |  |
| In this instance,   |                 |  |  |  |  |
|   |                 |  |  |  |  |
| The solar panels should be placed where there is the least impact in terms of; the setting of the listed building; views from public vantage points, best and most versatile agricultural land and ecology.  Consideration of impact on heritage assets will be required including Conservation Areas |                 |  |  |  |  |
| Listed Buildings and potential archaeological interest.  Conclusion   |                 |  |  |  |  |
| Conclusion  |                 |  |  |  |  |
|   |                 |  |  |  |  |
|   |                 |  |  |  |  |
| Submission Documents  |                 |  |  |  |  |
| Should you decide to submit a planning application I would recommend that   | t tho           |  |  |  |  |
| following documents are provided;   | , ti i <b>c</b> |  |  |  |  |
|   |                 |  |  |  |  |
|   |                 |  |  |  |  |
|   |                 |  |  |  |  |
|   |                 |  |  |  |  |
|   |                 |  |  |  |  |
|   |                 |  |  |  |  |



You will appreciate this list may not be exhaustive but is given as a guide based on the information submitted to date.

Statement of Community involvement. Bearing in mind the scale of the development proposed and i

Whilst the principle of such development may be in accordance with local and national planning policies it will be necessary for careful consideration to be given to the application and all the supporting technical information assessed by the relevant consultees. In these circumstances I am sure that you will appreciate that I can give no guarantee that such a proposal will receive a favourable recommendation at Officer level. You will also appreciate that the advice contained in this letter is offered without prejudice to any decision the Borough Council may reach on a planning application for the proposed development. On receipt of an application, the comments of other bodies will be sought, and these may raise further issues not anticipated at this stage. Therefore, the outcome of the application cannot be guaranteed. Furthermore, this advice may not be relied upon if an application is not made within one year or there are significant changes in policy.

However, please do not hesitate to contact me on the above telephone number should you wish to discuss this matter further.

Kind Regards



Principal Area Planning Officer